REMARKS/ARGUMENTS

Claims 1-34 stand rejected in the outstanding Official Action. Claims 1 and 14 have been amended and therefore claims 1-34 remain in the application.

The Examiner's acknowledgment of Applicants' claim for priority and receipt of the certified copy of the priority document is very much appreciated. Additionally, the Examiner's consideration of Applicants' previously submitted Information Disclosure Statement and the references cited therein is very much appreciated.

Claims 1, 2, 8-10, 12, 14-17, 20 and 24-34 stand rejected under 35 USC §102 as being anticipated by Hattori (JP 409021922 A). The Court of Appeals for the Federal Circuit has noted in the case of *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 USPQ 481, 485 (Fed. Cir. 1984) that "[a]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim."

Applicants' independent claims 1 and 14 both recite optical waveguides which are "hollow core optical waveguides formed as a channel in a substrate" (claim 1 recites two hollow core optical waveguides and claim 14 recites at least one). As a result, the Hattori reference, in order to anticipate or render obvious, must disclose a **hollow core** optical waveguide.

As is well known by those of ordinary skill in the art, a hollow core waveguide actually has a "hollow core," i.e., one which is not solid. Moreover, "hollow core" is defined in the second full paragraph on page 2 of Applicants' specification as filed, i.e., "the term hollow core simply means a core which is absent any solid material" and may include "any fluid (for example a liquid or an inert gas such as nitrogen) or be a vacuum." Thus the term "hollow core" is given

its common definition by those of ordinary skill in the art and is also specifically defined in applicant's specification.

The Examiner states on page 2 that the Hattori reference discloses "first and second waveguides are **hollow core** optical waveguides" (emphasis added) and for support references the reader to "line 3 of abstract." There is no reference to a "hollow core" in line 3 of the abstract provided to the applicant by the Examiner. In line 5, the provided abstract states "utilizing a **hollow shape** process of first forming a groove for . . ." (emphasis added). In other words the Examiner's statement is incorrect.

The only thing in common between the Hattori reference and the Examiner's allegation that it discloses "hollow core optical waveguides" is the use of the term "hollow." Hattori uses the term as a limitation on the "shape process of first forming a groove" which has nothing to do with Hollow core waveguides. Applicants use the term to modify "core" so as to mean hollow core in conjunction with the definition set out in Applicants' specification. Other than the term "hollow," there is no commonality between the Hattori reference and the subject matter of Applicants' independent claims 1 and 14 and claims dependent thereon.

A careful review of the Hattori reference by the Examiner will indicate that nowhere does it disclose a "hollow core" waveguide. A review of the method steps disclosed in the abstract and the drawings of what appear to be Figures 1 and 3 clearly indicates that while a groove is formed during processing of the Hattori optical amplifier waveguide, the groove is later filled in with either core glass 7 or Er added core glass 3. While Hattori may well form a solid core optical waveguide, it clearly does not teach, and indeed teaches away from, any hollow core waveguide.

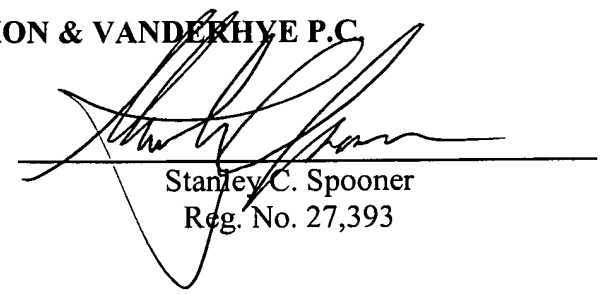
To the extent the Examiner believes the Hattori reference contains any teaching of a hollow core optical waveguide, he is respectfully requested to point out such disclosure in the Hattori reference. Should the Examiner be in possession of a translation of the Hattori reference upon which he bases his contentions, he is respectfully requested to provide Applicants with a copy of the same. The Examiner's conclusions are simply not supported by the provided translation of the abstract when read in conjunction with the Japanese language Hattori reference. As a result, claims 1, 2, 8-10, 12, 14-17, 20 and 24-34 cannot possibly be anticipated by Hattori, since Hattori fails to teach any hollow core optical waveguide and any further rejection thereunder is respectfully traversed.

Claims 3-7, 11, 13, 18, 19 and 21-23 stand rejected under 35 USC §103 as unpatentable over Hattori. Inasmuch as claims 3-7, 11, 13, 18, 19 and 21-23 all depend from either claim 1 or claim 14, the above comments regarding the Hattori reference are herein incorporated by reference. Because Hattori teaches away from a "hollow core optical waveguide" in its teaching of solid core optical waveguides, one of ordinary skill in the art would be "led away" from Applicants' independent claims 1 and 14 in view of the Hattori teaching. Any further rejection of claims 3-7, 11, 13, 18, 19 and 21-23 as obvious over the Hattori reference is respectfully traversed.

Having responded to all objections and rejections set forth in the outstanding Official Action, it is submitted that claims 1-34 are in condition for allowance and notice to that effect is respectfully solicited. In the event the Examiner is of the opinion that a brief telephone or personal interview will facilitate allowance of one or more of the above claims, he is respectfully requested to contact Applicants' undersigned representative.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: 

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